REMARKS

The change to the Summary of the Invention adds no new matter and better accords with what is claimed after old claims are cancelled and new claims are presented by this Amendment.

Claims 1, 2, 4-9, 11, 19, 20, 22-27, and 29 were rejected under 35 U.S.C. 102(b) as being anticipated by Ainslie et al (US 4,761,699), hereinafter referred to as Ainslie. Claims 3, 10, 21 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ainslie. Applicants respectfully traverse these rejections, cancel all pending claims, and submit new claims 30 - 39 that are not anticipated by nor obvious in view of Ainslie, and are thus patentable thereover.

Applicants have reproduced below Fig. 7 of Ainslie, which is relied upon in the office action.

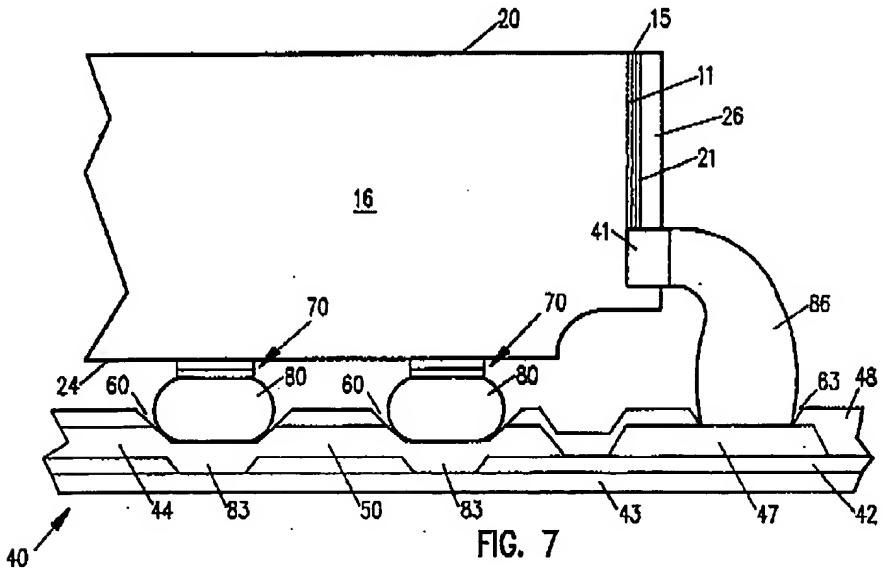


FIG. 7

As illustrated in Fig. 7 and described in Ainslie, "the composite suspension 40 now includes an underlying support layer 43, which may be a stainless steel flexure, onto which the base layer 42 is adhered. Portions of nonconductive base layer 42 are etched away in the areas 83 where solder balls 80 are to be aligned. Thus, when the copper layer 44 is formed it is placed in direct contact with stainless steel in the areas 83. This allows solder balls 80 to form both a mechanical connection and an electrical grounding path to the stainless steel support layer 43." Reference is made to Ainslie, column 8, lines 14-24.

Thus, in Ainslie, a copper layer 44 remains interposed between the solder balls 80 and the underlying support layer 43, even when the solder balls 80 are melted. The copper layer 44 prevents the molten solder from establishing direct contact with the underlying support layer 43. Furthermore, in Ainslie, a non-conductive base layer 42 also separates the copper layer 44 from the underlying support layer 43 (in regions other than regions 83).

Consequently, in Anslie's configuration, if it desired to melt the solder balls 80 by heating underlying support layer 43 (the flexure tongue), the non-conductive base layer 42 would at least partially thermally insulate the copper layer 44 from the flexure tongue, tending to inhibit or delay such heating.

However, the slider to flexure soldering process now needs to be practically accomplished in a very short period of time in order to allow for automated and highly expensive vision assisted slider positioning systems to be fully utilized. The present patent application meets this contemporary need by teaching a particular heating method to melt the solder balls: directly and locally heating the flexure tongue by means of a laser. In contrast, heating by convective heating in an oven can be slower, less direct, and/or less localized. For example the oven temperature must be maintained below the level that would degrade the integrity and magnetization of the magnetic read/write element already integrated into the slider.

Therefore, whereas the presence of the copper layer 44 and non-conductive base layer 42 as taught by Ainslie may be compatible with an assembly process that uses convective heating in an oven, it is incompatible with and teaches away from the use of direct and localized heating of the gimbal tongue using a laser.

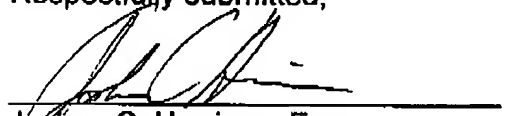
Applicants further submit that Ainslie does not address the issue of separating the slider from the flexure, if the slider were defective, so that the flexure could be reused. One of ordinary skill in the art would recognize that the presence of the non-conductive base layer 42 of Ainslie would require excessive heat to be applied to the underlying support layer 43 to effect the melting of the solder and the separation of the flexure from the slider. Such excessive heat could damage the flexure, rendering it unusable, and therefore defeating one of the objectives of the present invention.

New independent claim 30 requires heating of the flexure tongue by a laser, and direct solder contact with the flexure tongue. Therefore, Ainslie does not anticipate nor render obvious independent claim 30 and the claims dependent thereon, and therefore, all pending claims are allowable over Ainslie.

All pending claims are in condition for immediate allowance, and such action is respectfully requested. If it is felt for any reason that direct communication would serve to advance prosecution of this case to finality, the Examiner is invited to call the undersigned at the below-listed telephone number.

Date: October 12, 2004

Respectfully submitted,



Joshua C. Harrison, Esq.
Reg. No. 45,686

Joshua C. Harrison
Western Digital Corporation
20511 Lake Forest Drive
Lake Forest, CA 92630
Tel: (949) 672-6119
Fax: (949) 672-6604